DOCUMENT RESUME

ED 080 335 SE 016 436

AUTHOR Funaro, George J.
TITLE Interpersonal Communication and the Science Classroom.
PUB DATE Mar 73
NOTE 7p.; Paper presented at the annual meeting of the National Science Teachers Association (21st, Detroit, Michigan, March 1973)

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Humanities; *Interpersonal Relationship; *Opinions; Science Education; *Science Teachers; Teacher Attitudes; *Teacher Behavior; Teacher Role

ABSTRACT

Based on the assumption that most science teachers are fairly comfortable and well informed in the cognitive area, the author concentrates on the presentation of man as an emotional and a feeling creature. An attempt is made to describe how perceptions, values, and feelings affect him and how he attempts to protect or reveal himself. In relation to his contact with students, he concludes that the classroom is, before anything else, a place where human beings come together to learn about themselves and the world they live in. If it is to accomplish these purposes, then it must be something more than a microcosm of life - a setting supportive of the development of humanness - an environment of emotional involvement where both student and teacher risk the exposure of real feelings and values in a mutual effort to enhance the quality of human interaction. (Author/EB)

FILMED FROM BEST AVAILABLE COPY

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED 080335

Interpersonal Communication and the Science Classroom*

George J. Funaro

Science teachers have long accepted the premise that a classroom is the forum for the free and open expression of ideas--all points of view, opinions, conjectures, and facts are to be accepted for consideration. Only by this openness and its implied methodology could productive inquiry and discovery occur. Perhaps because the data and questions under consideration were felt to be relatively objective and subject to rigorous analysis, there seemed to be little necessity to examine the phenomenon of the "human factor" and its consequent impact upon free and open inquiry. Classroom communication and interaction are difficult enough to ascertain and improve without the added proviso imposed by the discipline itself that this interaction be open to all questions and beliefs. By tradition then, the science classroom is in a sense "constrained" to be open for all inquiry. If tradition is to be translated into practice, then the science teacher has one of the most obvious challenges for the promotion of instructional dialogue. This challenge goes beyond the comparative safety of cognitive interchange and assumes all the complexities inherent in affective communication: individual value and attitudinal systems, emotions and feeling -- the "human factor" in education.

The importance of the human factor is worthy of at least the same consideration as that given to the academic. To some scientists there is insufficient time to devote to this concern - few things should interfere with the search for new knowledge. And indeed, a concern such as this would be

* Presented at the 1973 national convention of the National Science Teachers Association in Detroit, Michigan.

SE 016 436

a demanding one in time, effort, and emotional investment. The dissemination and not the search for new knowledge is the professional obligation and responsibility of the science educator however, and as an educator he is vitally concerned with how people feel as well as how they think.

The fact that "facts" are perceived in terms of the individual's emotional value and attitude perspective is by no means a startling revelation. What is startling, perhaps, is that these considerations are often left to chance - while great amounts of time are devoted to planning instructional units, including selection of materials and media, designing evaluation instrumentation, etc., the personality of instructor and student and the affective dynamics between them are not viewed as phenomena subject to control, direction, or development and thus receive comparatively low priority in planned time and effort investment. Yet, every teacher knows how much worry, anxiety, tension and emotional sweat have gone into the affective dynamics of the classroom; it actually consumes more time and more intellectual energy than that devoted to concern for "content".

To be sure, the affective dimension of teaching is somewhat determined by the innate personal qualities of individuals together with those learned through the process of socialization. These are the basics that all human beings bring with them in any interaction. These basics are subject to modification; there are possibilities for development and direction in dealing more effectively with human relationships.

The Private and Public Worlds of Human Relationships

I am assuming that many of us are fairly comfortable and well grounded in the cognitive area; that is, many of us may feel that we are reasonably well informed about the knowledge structures that need to be taught and the technical and organizational skills required to teach them. Assuming that

this is the case, I shall concentrate this presentation on man as an emotional and a feeling creature - not man in any general sense, but man in a very specific sense, that is, one man - me. I have the feeling that I am not too different from most of you. I cannot support what I am about to say with any incontrovertible research or documentation; I can only attempt to describe how perceptions, values, and feelings affect me and how I attempt to protect or reveal myself in a sometimes hostile and sometimes comforting world - a world that is both private and public.

Let me comment first on my private world. What do I mean by my private world? I mean all those things that pertain to my values, my feelings, my emotions, my beliefs. Me as seen by me, and the process I employ in coming to regard myself. This is the me that I reveal to relatively few people; this is the me that exists somewhere deep down within me; this is the me about which I can cry and I can feel joy; and, most of all, this is the me that imparts meaning to my existence for good or bad, for fulfillment or emptiness. My private world is relatively defenseless, spontaneous, intimate, personal, emotional, imaginative, and most of all, vulnerable. It's full of passion, need, love, grief, shame, loneliness, hurt, fear, courage, weakness, and the constant moral struggle between good and evil.

How much of this am I willing to share with you? How close can you come? How close will I allow you to come? You can make a difference in my life by your desire to come to know me in this way. Reach out to me on this level and you will have touched my essence. If you choose to do so, then you immediately recognize that it is not easy, nor comfortable, for you or for me. The process demands personal introspection; it is far easier to

treat each other as "non-persons" for then we don't have to look deeply into ourselves - that sometimes can be a painful experience.

Strangers can afford to be "intimate" in relating while friends require greater caution. The friend possesses knowledge about my vulnerability; he is a source of potential hurt, while a stranger, because he is a stranger, can reinforce and support but seldom hurt. But most authentic intimacy occurs with individuals whom we encounter on a fairly regular or sustained basis. The quality of our relationship rests on my ability to reveal more and more of myself until I feel that I am authentically me without fear of impending ridicule or attack. Such interaction is dependent upon the trust I am willing to invest in the other and my interest in discovering him. In establishing that trust, I then create the conditions wherein I can be trusted. In discovering him, I discover me.

Basic also to the human transaction is a fundamental premise that all too often is judged by the sophisticates as "corny" and trite but nonetheless, the most important human need, undiminished by time, age, or circumstance: I need affection - I need someone to care about me - someone who values who I am and who demonstrates such by thought, word, or action.

My public world? This is the world in which I must survive, hopefully with meaning, but all too often, with perfunctory and automatic response. This is me as seen by them. My public world is made up of all the roles that I play. Some of these roles reveal my vulnerability and are windows on my soul; many others are defensive and protective and deliberately meant to offer the camouflage I need for survival. What are some of the roles I play?

Teacher, speaker, administrator, subordinate, organization man, friend, enemy, lover, humanist, romanticist, dreamer, citizen, gypsy, the eclectic, the procrastinator, the egocentric, the survivor, and on, and on, and on....The important consideration here is the authenticity or non-authenticity of the role and the situation. The basic questions are - which of these roles expose me and which protect me? Which of them are really consistent with the me within me? Which are authentic? Which completely depart from the me within me? Which are contrived? How do I react and how do others react to me when I am vulnerable and when I am protected?

The public and private worlds come into conflict most obviously when I am subjected to the process of evaluation. For when someone is charged with the task of evaluating me and my performance, the thoughts that run through my mind are those that will determine whether this evaluation will have meaning for me. Who is he who is looking at me? Why is he looking at me? Do I trust him? How does he make me feel? How should I feel? What is the reward system? What can I risk? What can I reveal? Can I admit my weaknesses? Can I openly ask for help? What does he want me to say?

The Objective and Subjective Views

The private and public worlds focus on me. Beyond this, I focus on others. I come in contact with individuals about whom I form perceptions, make judgements, and develop relationships. How do I regard them in the objective sense, i.e., he or she as seen objectively by me? I see him in terms of the role he plays: my student, my supervisor, my colleague, my friend, my child.

As my student I see what he can do, what he cannot do, his grades, his courses, his cumulative record. He is either a student of mathematics, of science, of English. And I may respond to someone who inquires of him: "Johnny? Oh, he does well in abstract reasoning, but not in problem solving."

In this objective process, I analyze, I predict, I assign tasks, I supervise work. I, the teacher, am the human chemist, and people are fascinating objects of study. My need here is to remain detached and objective.

A second aspect of how I regard him is the subjective dimension, that is, he or she as seen by me empathically, intuitively, and I ask such questions as: What more is he? What does he feel? How does he see the world? How do I make him feel? How does he make me feel? Who is he outside my classroom?

The Integration of Self and Affective Needs

For purposes of clarity and exposition, I have rather artificially categorized myself as either subjective or objective, as either private or public, when in reality, I am all of the above, simultaneously and in varying degrees. And so are you! The fundamental question then becomes: When I perceive you, do I see them all in you? When I evaluate you, do I consider them all in you? The final difference: Do I see you in an eternal sense? Do I see you as something more than what is on the surface? Do I see you inside?

The integration of self requires recognition of personal affective needs. Not only must they be recognized, but insofar as possible, one should attempt to act upon them. I have a number of such needs, a few of which are particularly relevant to this discussion.

I have a need to feel that I can be wrong and admit my weakness and faults without loss of self or image. But I also have a need to be right, to be successful in at least something important to me. If you want to reach me, help me to discover my worthwhileness.

I have a need for security, stability, and identify. I would like the world to be essentially the same from day to day - not forever - only long enough to catch my breath and take stock of where I am and who I am. Change isn't always for the best - even change that can be considered positive can be emotionally upsetting if it occurs too frequently in limited time frames. Changing myself or attempting to change others carries with it some significant potential for damage. I need to recognize the consequences of the phenomenon of change and be sensitive to those which may be good and those that may be destructive.

I also have a need to be provided with alternatives to whatever it is I encounter in my daily living; I want to be free to make my own choices, yet, I don't want to be so continually confronted by multitudes of choices that I am overwhelmed by the prospect. From time to time I need direction. I would like someone to help guide me, to offer me counsel, to suggest consequences of my behavior, to provide me with a perspective different from mine and, yes, on occasion, someone who cares enough to assume control and responsibility for me - the comforting thought that for a moment there is someone in whose hands I can place myself and for that moment know that I am protected and cared for.

Conclusion

A classroom is, before anything else, a place where human beings come together to learn about themselves and the world they live in. If it is to accomplish these purposes, then it must be something more than a microcausm of life - a setting supportive of the development of humanness - an environment of emotional involvement where both student and teacher risk the exposure of real feelings and values in a mutual effort to enhance the quality of human interaction.